20

35

13

14

the data module when it is inserted into the receptacle in the rear of the meter. The computer system 147 can generate a pulse duty cycle of 25% or 75% by means of the pulse gating circuit 151. In addition it can suppress the pulse output altogether to generate missing clock 5 pulses.

The computer system 147 detects the presence or absence of a data module by detecting the module's loading of the interface 117 when a 25% duty cycle pulse train is applied to the interface 117. If the module 10 is absent, the computer system 147 displays OFF on the vacuum fluorescent clock display 142 by means of display driver electronics 157. If a module is present, the computer system 147 validates the information fields within the module, reads the time from the module and 15 displays the time on the vacuum fluorescent clock display 142. It then proceeds to record time-stamped channel and people statements in the module as they are received from the mains supply.

We claim:

1. A storage module for storing television usage monitoring data to be transferred as a plurality of data words between a receiver and a data processor, com-

means for releasably electrically coupling the storage 25 module to the receiver and to the data processor;

means for measuring time and having an updating input for receiving an updating signal from the data processor for updating the time measuring means; means comprising a semiconductor store for storing 30 the data words;

means coupling the storage means to the releasable coupling means for transferring the data words from the receiver to the storage means and from the storage means to the data processor; and

means coupling the coupling means to the time measuring means for transferring the updating signal from the data processor wherein the means for measuring the passage of time includes means whereby each of a plurality of the data words 40 sor as claimed in claim 3 wherein: transferred from the storage means to the data processor comprises an indication of the time at which data carried by each data word was received by the receiver.

2. A storage module as claimed in claim 1 wherein the 45 time measuring means comprises means for outputting the time to the receiver and whereby the data words formatted in the receiver carry an indication of the time at which data carried by the data words was received

3. An apparatus for transferring data obtained from a television viewing monitoring system to a data processor, said apparatus comprising:

a transmitter having means for accepting data relating to the number of people watching a television set 55 and the channel to which the television set is tuned and means for transmitting said data;

a semiconductor storage module for storing said data and comprising an updatable clock, semiconductor storage means and electrical coupling means con- 60 nected to said clock and storage means for the passage of data between the coupling means and the clock and between the coupling means and the storage means; and

a receiver having means for receiving said data and 65 means for removably electrically coupling said receiving means to said coupling means of said storage module for the transfer of said received

data to said storage module, whereby said storage module is able to be removed and its stored data read by and its clock updated by an external data processor, the storage module further comprising means for outputting to the external data processor time information derived from the updatable clock and relating to the time at which said data was received by the receiver.

4. The apparatus as claimed in claim 3, wherein the transmitting means comprises means for transmitting the first and second data by way of a domestic mains

wiring system.

5. The apparatus as claimed in claim 4, wherein the accepting means comprises means for formatting the first and second data as a multi-bit digital word, and in which the first transmitting means comprises: in

means for defining a plurality of time slots each half cycle of a voltage supply of the mains wiring system, which voltage supply fluctuates about a baseline at mains supply frequency, the time slots being referenced to baseline crossings of the voltage sup-

means for generating a carrier signal for the monitoring system;

means for gating the carrier signal "on" and "off" according to the bit values of the digital word,

means for selecting one of the plurality of time slots for the transmission of the carrier signal when gated "on", whereby with a plurality of such monitoring systems, the time slots are selectable to correspond uniquely to the respective monitoring systems: and

means for transmitting the carrier signal, when gated "on", onto the mains wiring system in the time slot corresponding uniquely to the monitoring unit from which the first and second data is accepted.

6. An apparatus for transferring data obtained from a television viewing monitoring system to a data proces-

the semi-conductor storage module comprises means for receiving signals from the data processor for updating the clock when the storage module is coupled to the data processor; and

the transmitter comprises means for transmitting the data by way of a domestic mains wiring system.

7. An apparatus for handling data obtained from a television viewing monitoring system for use with a television selectively tunable to any of a plurality of channels, the apparatus comprising:

means for monitoring people and producing first data relating to the number of people watching the tele-

means for detecting the channel to which the television set is tuned and producing second data representative thereof;

means for accepting the first and second data;

first means coupled to the accepting means for transmitting the first and second data to a receiver; and

a semiconductor storage module for storing the first and second data received by the receiver, the storage module comprising:

means for releasably electrically coupling the receiver to the semiconductor storage module for the transfer of the first and second data thereto from the receiver:

semiconductor storage means for storing the first and second data received by the receiver;